

Title: Near-Earth Asteroid Tracking at Maui and Palomar

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Near-Earth Asteroid Tracking (NEAT) is contributing to the NASA goal of discovering at least 90% of the Near-Earth asteroids (NEAs) > 1 km by 2010. These are NEAT's primary targets. In late 1999 and early 2000 Air Force Research Laboratory modified the Maui Space Surveillance Site (MSSS) 1.2-m telescope and Jet Propulsion laboratory provided a version of its NEAT system to perform an asteroid survey. Since 3 March 2000, NEAT has operated at least 18 nights/month on the MSSS 1.2-m. Despite atypically bad weather that has reduced observing efficiency to 30%, NEAT has discovered 2 NEAs in the primary category and 2 other interesting objects. NEAT has detected more than 9000 asteroids, including 20 NEAs in the primary category, and 2 comets.

The NEAT program is also managing a NASA-funded upgrade of the 1.2-m (48") Oschin Telescope at Palomar Observatory. This telescope previously performed the two Palomar Sky Surveys. With the addition of a computer-controlled pointing and control system, and a large-format multi-CCD camera, NEAT will begin a large-scale asteroid survey in late 2000. We discuss both the Maui results and the Palomar plans in this presentation.